

1219857

[0089313]

SGW-37320

Revision 0

Waste Control Plan for the 200-PW-2/4 Operable Unit

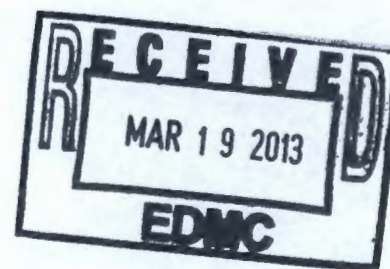
Prepared for the U.S. Department of Energy
Assistant Secretary for Environmental Management

Project Hanford Management Contractor for the
U.S. Department of Energy under Contract DE-AC06-96RL13200

FLUOR

P.O. Box 1000

Richland, Washington



Ref - 0081505

Approved for Public Release:
Further Dissemination Unlimited

27 pgs

SGW-37320
Revision 0

Waste Control Plan for the 200-PW- 2/4 Operable Unit

D. Todak
Fluor Hanford, Inc.

Date Published
April 2008

Prepared for the U.S. Department of Energy
Assistant Secretary for Environmental Management

Project Hanford Management Contractor for the
U.S. Department of Energy under Contract DE-AC06-96RL13200

FLUOR®

P.O. Box 1000
Richland, Washington


Release Approval

05/07/2008
Date

Approved for Public Release
Further Dissemination Unlimited

TRADEMARK DISCLAIMER

Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise, does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof or its contractors or subcontractors.

This report has been reproduced from the best available copy.

Printed in the United States of America

APPROVAL PAGE

Title: Waste Control Plan for the 200-PW-2/4 Operable Unit

Approvals:

J. D. Williams

Manager, Remedial Investigation Project

J. D. Williams IV FOR

Signature

4/22/08

Date

P. M. Rogers

200-PW-2/4 Operable Unit Project Manager

Phil Rogers

Signature

4/22/08

Date

R.W. Oldham

Environmental Compliance Officer, Soil and Groundwater Remediation Project

R. W. Oldham

Signature

4.22.08

Date

D. Todak

Waste Coordinator, Soil and Groundwater Remediation Project

D. Todak

Signature

4-22-08

Date

This page intentionally left blank.

WASTE CONTROL PLAN**Work Scope Description:**

200-PW-2/4 Operable Unit (OU) characterization in the 216-A-5 and 216-S-1/2 Crib. The scope of work includes advancing three direct-push boreholes and two deep boreholes, geophysically logging each borehole, and collecting soil and groundwater samples that will be analyzed for radiological and non-radiological contaminants of concern. One direct push borehole and one deep borehole will be installed in the 216-A-5 Crib. Two direct push boreholes and one deep borehole will be installed in the 216-S-1/2 Crib. Decommissioning of the boreholes will be performed upon completion or as deemed necessary when data collection activities are completed.

List Contaminants of Concern:

Contaminants of concern at the 200-PW-2/4 OU include radionuclides, metals, anions, and volatile and semi-volatile organic compounds. See SGW-37323, *Data Quality Objectives Summary Report for the Designation of Investigation-Derived Wastes in the 200-PW-2/4 Operable Unit*.

Site Description:

The Hanford Site in southeastern Washington State is comprised of multiple operable units and geographically delineated areas. The 200-PW-2/4 OU consists of four waste sites in the 200 West Area, including 216-S-1/2 Crib, and nine waste sites in the 200 East Area, including the 216-A-5 Crib. These waste sites primarily received uranium-rich process condensate/process waste, process drainage, process distillate discharge, and miscellaneous condensates. Wastes came from the 221/224-U Plant Uranium Recovery Project (URP), the Reduction-Oxidation (REDOX) process facility, the 224-U/VO₃ Program for the Plutonium/Uranium Extraction (PUREX) Plant, the 221-B (B Plant), Hot Semiworks (C Plant), and several contributing tank farm operations. Figures 1 and 2 show the locations of the 216-A-5 and 216-S-1/2 Crib as well as the locations of the planned boreholes and waste container storage areas. Additional information on these sites is presented in DOE/RL-2004-85 and DOE/RL-2007-02 Volume II Addendum 5.

References:

CP-13934, *Waste Control Plan for the 200-PW-4 Operable Unit*, Rev.0
 CP-13935, *Waste Control Plan for the 200-PW-2 Operable Unit*, Rev.1
 DOE/RL-2004-85, *Feasibility Study for the 200-PW-2 Uranium-Rich Process Waste Group and the 200-PW-4 General Process Condensate Group Operable Units*
 DOE/RL-2007-02, *Volume II, Addendum 5, Site-Specific Field-Sampling Plans for the 216-A-5 Crib and 216-S-1/2 Crib, 200-PW-2/4 Operable Unit*

Date Approved April 2008

Preparer: David Todak

Print/Sign Name

Date

4-22-08

Impact Level
N/A

Project Task Lead: P. M. Rogers

IDW Coordinator: M. W. Vermillion

Planned Drilling Start and Finish Dates: From: May 2008

To: December 2008

Waste Storage Facility ID Number(s) N/A

WASTE CONTROL PLAN				
Field Screening Methods				
Method	Frequency	Reference	Detection Limit or Range	Analyst
Alpha/beta-gamma detector	As required by radiological risk assessment and work permit	RAP-SGRP-08-028 RAP-SGRP-08-029	100 d/min alpha 1921 d/min gamma-beta	RCT
Dose rate, gamma	As required by radiological risk assessment and work permit	RAP-SGRP-08-028 RAP-SGRP-08-029	0.5 mR/h	RCT
Spectral gamma logging	Continuous from TD to surface	HGLP-MAN-002, Rev.2	TBD	Contracted borehole logger
Neutron moisture logging	Continuous from water table to surface	HGLP-MAN-002, Rev.2	TBD	Contracted borehole logger
Laboratory Methods (Contaminants of concern)				
Method	Frequency	Reference	Detection Range	Analyst
DOE/RL-2007-02, Vol. I, Tables A2-1 and A2-2	DOE/RL-2007-02, Vol. II, Tables AD5-1 and AD5-3	DOE/RL-2007-02, Addendum 5	DOE/RL-2007-02, Vol. I, Tables A2-1 and A2-2	On or off site Laboratory
<p>200-PW-2/4 OU Drilling Locations: Multiple locations have been identified for installation of boreholes through direct push and drilling methods as shown in Figures 1 and 2. Coordinates are as follows:</p> <p>216-A-5</p> <p>C6551: Northing – 135494.70 Easting – 575043.28</p> <p>C6552: Northing – 135495.28 Easting – 575048.95</p> <p>216-S-1/2</p> <p>C6553: Coordinates TBD, approximate location noted in Figure 2</p> <p>C6554: Coordinates TBD, approximate location noted in Figure 2</p> <p>C6555: Coordinates TBD, approximate location noted in Figure 2</p> <p>Decommissioning: The only wells currently identified for decommissioning in this OU are the boreholes to be installed as described above and shown in Figures 1 and 2. As additional wells are identified for decommissioning, formal approval will be sought and granted through Tri-Party Agreement change notices and entered into the administrative record with Unit Manager's Meeting (UMM) minutes following discussion at a UMM.</p> <p>Waste Container Storage Area(s) (WCSA) Coordinate Location(s): Three waste container storage areas will be established to manage the investigation-derived wastes generated by the proposed drilling, sampling and decommissioning activities. One of these will be located at the 216-A-5 Crib and another will be at the nearby 216-A-10 Crib. The third will be at the 216-S-1/2 Crib, as shown in Figures 1 and 2. Operational requirements may mandate minor movement of the specified WCSAs, provided they remain in or adjacent to the identified waste sites. If these locations need to be substantially moved to accommodate future work, such changes will be approved in a Tri-Party Agreement change notice and entered into the administrative record with UMM minutes following discussion at a UMM.</p> <p>Requirements for Spoils Pile Sampling (if any): Not applicable – All drill cuttings/spoils will be containerized.</p> <p>Non-regulated Material Disposal Location(s): An off-site Subtitle "D" landfill can be used for disposal of non-regulated miscellaneous solid waste that has been surveyed for radiological release in accordance with <i>PHMC Radiological Control Procedures</i> (HNF-13536), Section 4.1.1, "Standard Radiological Release Survey for Material and Equipment." Non-regulated soil waste may be returned to the ground at or near the point of excavation in accordance with GRP-EE-02-14.5: <i>Returning Vadose Zone Drill Cuttings/Soils to the Environment</i>, the location of which will be documented in the field logbook. Liquid wastes (e.g. purgewater, decontamination fluids) will be collected and taken to the Purgewater Storage and Treatment Facility (PSTF) or the Effluent Treatment Facility (ETF).</p> <p>200-PW-2/4 OU Sketch of Work Site: Figures 1 and 2 identify the borehole locations and waste container storage areas at the 216-A-5 and 216-S-1/2 Crib.</p>				
APPROVALS (Print/Sign Name and Date)				

WASTE CONTROL PLAN	
 4-30-2008 Lead Regulatory Agency Representative	M.W. VORMILLION PER TELECON  4-22-08 IDW Coordinator
 4-22-08 DOE-RL RPH.	 4/22/08 Project Task Lead

This page intentionally left blank.

ATTACHMENT A

DESCRIPTION OF WORK

This page intentionally left blank.

CONTENTS

A1.0	DESCRIPTION OF WORK	A1-1
A1.1	WASTE STREAMS	A1-2
A1.2	WASTE GENERATION AND MANAGEMENT	A1-2
	A1.2.1 Miscellaneous Solid Waste	A1-3
	A1.2.2 Well Decommissioning Waste	A1-3
	A1.2.3 Drill Cuttings	A1-3
	A1.2.4 Decontamination Fluids	A1-4
	A1.2.5 Equipment and Construction Materials	A1-4
	A1.2.6 Non-dangerous/No-Radiation-Added Solid Waste	A1-5
	A1.2.7 Unplanned Release to the Environment	A1-5
A1.3	MANAGEMENT OF WASTE CONTAINERS	A1-5
A1.4	STORAGE AND FINAL DISPOSAL	A1-6
A1.5	RECORDS	A1-7
A1.6	ESTIMATE OF INVESTIGATION-DERIVED WASTE QUANTITIES	A1-7
A2.0	REFERENCES	A2-1

FIGURES

Figure A-1.	216-A-5 and 216-A-10 Location Map and Waste Container Storage Areas	A1-8
Figure A-2.	216-S-1/2 Location Map and Waste Container Storage Areas	A1-9

TABLES

Table A-1.	Estimate of Investigation-Derived Waste Quantities.	A1-7
Table A-2.	200-PW-2/4 Operable Unit Well List (1 sheet)	A1-10

TERMS

CERCLA	<i>Comprehensive Environmental Response, Compensation and Liability Act of 1980</i>
CWC	Central Waste Complex
DPT	Direct push technology
ERDF	Environmental Restoration Disposal Facility
ID	identification
IDW	investigation-derived waste
MSW	miscellaneous solid waste
OU	operable unit
PPE	personal protective equipment
PUREX	Plutonium-Uranium Extraction (Plant)
RCRA	<i>Resource Conservation and Recovery Act of 1976</i>
RCT	radiological control technician
REDOX	Reduction-Oxidation (Plant)
TRU	transuranic (waste materials contaminated with 100 nCi/g of transuranic materials having half-lives longer than 20 years)
TSD	treatment, storage, and disposal
WAC	<i>Washington Administrative Code</i>
WCSA	Waste Container Storage Area
WESF	Waste Encapsulation and Storage Facility
WMS	Waste management specialist
WSCF	Waste Sampling and Characterization Facility

A1.0 DESCRIPTION OF WORK

This waste control plan (WCP) governs the management of investigation-derived waste (IDW) generated in the 200-PW-2/4 Operable Unit under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA). The planned work scope includes activities detailed in the *Site-Specific Field-Sampling Plans for the 216-A-5 Crib and 216-S-1/2 Cribs, 200-PW-2/4 Operable Unit* (DOE/RL-2007-02, Volume II, Addendum 5).

The 200-PW-2 Uranium-Rich Process Waste Group Operable Unit (OU) and the 200-PW-4 General Process Waste Group OU consist of 13 waste sites located within 200 West (four sites) and 200 East (nine sites) Areas. The 200-PW-2 OU waste sites received uranium-rich process condensate/process waste, primarily from waste streams generated at the 221/224-U Plant Uranium Recovery Project (URP), the Reduction-Oxidation (REDOX) process facility, and the 224-U/VO₃ Program for the Plutonium-Uranium Extraction (PUREX) Plant, as well as the 221-B (B Plant) and Hot Semiworks (C Plant) facilities in the 200 East and 200 West Areas. Most of the process waste sites received uranium-rich solutions from both the cold runs (nonirradiated uranium) and the startup phases before the three main plants began operation. The process condensates were vapors collected from thermally hot process steps that were condensed and subsequently discharged to the ground. Waste sites in the 200-PW-4 OU received mostly process drainage, process distillate discharge, and miscellaneous condensates from the U Plant, the REDOX Plant, the PUREX Plant, the Hot Semiworks Facility, and several contributing tank farm operations. DOE/RL-2000-60, Rev. 1, *200-PW-2 Uranium-Rich Process Waste Group Operable Unit RI/FS Work Plan and RCRA TSD Unit Sampling Plan* describes the process history of these OUs in detail.

The work activities currently planned include drilling two boreholes to groundwater, one each at the 216-A-5 and 216-S-1/2 Cribs, and the installation of three direct-push technology (DPT) boreholes. All five of the boreholes will be geophysically logged and sampled. The five boreholes will not be constructed to meet the Washington Administrative Code (WAC) 173-360, Minimum Standards for Construction and Maintenance of Wells, but will be decommissioned following the collection of data detailed in the sampling and analysis plan. Although these are the only boreholes slated for decommissioning in association with this work scope, there may be other wells in the 200-PW-2/4 OU that do not meet modern construction criteria and which will be similarly decommissioned. Waste generated from decommissioning activities is IDW and will be designated based on sample data and/or surrounding waste site characterization data.

Wastes generated during this project will be managed in accordance with this WCP and state and Federal regulations. An overview of the waste management strategy for the 200 Areas waste sites is presented in Appendix E of DOE/RL-98-28, *200 Areas Remedial Investigation/Feasibility Study Implementation Plan – Environmental Restoration Program*. Every effort will be used to minimize waste generated during this project.

A1.1 WASTE STREAMS

One or all of the below waste streams are anticipated and may fall into any combination of the following categories: transuranic (TRU), radioactive, mixed, hazardous, dangerous, suspect radioactive, suspect dangerous, suspect mixed, and nonregulated:

- Miscellaneous solid waste (e.g., rubber, glass, paper, personal protective equipment, cloth, plastic, and metal)
- Drill cuttings, soils, and slurries
- Decontamination fluids
- Equipment and construction materials (e.g., well casing, drill string, drive barrel, construction equipment and materials, sampling equipment, decommissioning materials, and wooden pallets)
- Nondangerous/no-radiation-added (nonradioactive) solid waste (e.g., paper, wood, construction debris, metal, plastic, and glass)
- Unplanned release and associated cleanup material
- Well decommissioning waste (e.g., miscellaneous solid waste (MSW), drill cuttings, soils & slurry, decontamination fluids and purgewater, equipment and construction debris).

A1.2 WASTE GENERATION AND MANAGEMENT

All waste generated will be recorded in the geologist and/or buyer technical representative logbook, with such details as waste location and type, sample depth, date of initial placement into container, date the container was sealed, and Package Identification Number. Marking, labeling, segregation, and staging of waste containers will be performed in accordance with a waste packaging and labeling instruction or as directed by the waste management specialist (WMS).

Waste will be stored at the site-specific waste container storage areas shown in Figures 1 and 2. The IDW will be stored at these areas until analytical data are evaluated for proper waste designation. The IDW will be disposed of at the Environmental Restoration Disposal Facility (ERDF) if it meets WCH-191, Rev. 0, January 2008, *Environmental Restoration Disposal Facility Waste Acceptance Criteria*. If TRU waste is encountered, it will be sent to the Hanford Site Central Waste Complex (CWC) for storage. In addition, if any waste needs to be transported to the CWC, the United States Environmental Protection Agency (EPA) will be contacted to make an offsite determination before the waste is shipped. Waste transported to the CWC for storage must be dispositioned in accordance with the work plan required by TPA Milestone M-016-93 for TRU waste generated by CERCLA cleanup actions of the Hanford Site and the final MO-016 Cleanup Schedule.

If the waste must be stored longer than six months after designation, the U.S. Department of Energy, Richland Operations Office (RL) will obtain concurrence from the lead regulatory agency on the schedule and location for disposition of the waste.

Details on the types and management of expected wastes are provided in the following subsections.

A1.2.1 Miscellaneous Solid Waste

MSW that has contacted suspect dangerous or suspect mixed waste will be treated as such. Field screening will be used to segregate radioactive IDW from no-radiation-added (non-radioactive) IDW except where process knowledge and/or analytical data dictate management as radioactive regardless of field screening results. MSW will be placed in plastic bags, taped closed, marked to indicate the associated borehole footage interval, and placed in container(s) specific to each area of potential contamination. Container(s) will be properly marked and labeled. The containers will be segregated from other materials, based on field screening results and location, and then staged at the designated site-specific waste container storage area. The MSW containers will be dispositioned using process knowledge and/or analytical results obtained from proximal or representative waste site soils.

A1.2.2 Well Decommissioning Waste

Well decommissioning wastes are to be treated as suspect dangerous or suspect mixed waste based on process knowledge and proximal and/or representative waste site characterization sample results. Refer to the specific data quality objective report for process knowledge and representative waste site analytical data. Some waste associated with decommissioning may be considered environmentally controlled material or nondangerous/no-radiation-added solid waste based on process knowledge and representative analytical data.

A1.2.3 Drill Cuttings

The majority of drill cuttings generated by this project will be from the vadose zone, (i.e. above the historical high water mark). Vadose zone drill cuttings are to be treated as radioactive, mixed, hazardous, dangerous, suspect radioactive, suspect dangerous, suspect mixed, suspect hazardous or nonregulated, based on process knowledge and field screening results. Nonregulated drill cuttings will be collected in stockpiles on plastic sheeting near the point of generation.

Those drill cuttings generated by drilling below the historical high water mark will be managed as saturated zone cuttings and segregated from vadose zone cuttings. Containerized saturated drill cuttings will be dewatered. Free liquids remaining in the container will be mitigated to 1% or less by volume and/or be absorbed prior to disposal as necessary. Dewatering slurries and mitigating free liquids is authorized without prior approval. The water generated from this activity will be managed as purgewater

Regardless of whether cuttings are generated in the vadose zone or the saturated zone, all cuttings identified as radioactive, mixed, hazardous, dangerous, suspect radioactive, suspect dangerous, or suspect mixed shall be properly containerized/packaged to mitigate the spread of contaminants to the environment. Containers/packages will be properly marked and labeled. The container lid will be marked with the date, well name, start and close date, start depth and ending depth, gross weight or estimated gross weight, and sampling date. The containers will be segregated from other materials, based on field screening results and location, and then staged at the designated site-specific waste container storage area or temporarily near the point of generation (e.g., drilling accumulated waste) until the waste samples are returned and/or the proper waste shipping papers are completed. The containers of drill cuttings will be dispositioned using analytical results associated with the contaminated media contacted.

IDW soil that does not designate as dangerous waste, is below WAC 173-340-740 Method B clean up standards, has been determined to be low risk for radiological contamination, and field surveyed to verify there is no detectable radioactivity above background, may be returned to the ground at or near the point of generation.

A1.2.4 Decontamination Fluids

Decontamination fluids (water and/or nondangerous cleaning solutions) generated from cleaning equipment and tools in the OU will be contained, transported, and discharged at the 200 Area Effluent Treatment Facility or the Hanford Site 600 Area Purge Water Storage and Treatment Facility (ModuTanks)¹ in accordance with Appendix F of the *Hanford Federal Facility Agreement and Consent Order* (Ecology et al. 1989). If necessary, decontamination fluids can be containerized and stored at the designated site-specific waste container storage area.

Additional chemical decontamination of sample equipment may be conducted at the Waste Sampling and Characterization Facility (WSCF), because decontamination and containment systems already are established at this location. The waste generated at WSCF is not considered IDW and will be managed in accordance with applicable regulations and requirements.

A1.2.5 Equipment and Construction Materials

Equipment and construction materials in contact with suspect dangerous and suspect mixed waste will be decontaminated with a three-bucket wash or a high-temperature and high-pressure wash (180 °F and >1000 lbf/in²) within a wash basin capable of retaining rinsate, or it will be treated as MSW. Water used for decontamination activities shall be potable (i.e., Hanford Site potable water or City of Richland water). Rinsate shall be managed as described in Section 1.2.3. Sampling equipment shall be cleaned and decontaminated for chemical contamination after radiological release by a radiological control technician (RCT). If contamination is determined to be fixed for any equipment or materials, the RCT and task manager will make the decision to remove the contamination using more aggressive methods or to dispose of the

¹ ModuTank is a trademark of ModuTank Inc., Long Island City, New York.

equipment. If necessary, equipment and construction materials can be containerized and stored at the designated site-specific waste container storage area.

A1.2.6 Non-dangerous/No-Radiation-Added Solid Waste

Nondangerous/no-radiation-added (nonradioactive) solid waste that is radiologically released will be disposed to an offsite solid waste landfill. This waste will not have contacted any suspect dangerous or mixed waste and will be free of any liquids. Items in this category include paper, wood, construction debris, metals, plastic, food waste, glass, etc. A radiological release certification form shall be attached and visible from outside the trash bag. If necessary, non-dangerous/no-radiation-added solid waste can be containerized, segregated, and stored at the designated site-specific waste container storage area.

A1.2.7 Unplanned Release to the Environment

The initial response to emergency and non-emergency events and conditions shall follow the direction provided in the individual work location Health and Safety Plan (HASP). Once the initial assessment is completed and appropriate measures have been taken to curtail and contain the spill or release, the WMS will ensure compatible waste container(s) are properly marked, labeled, and segregated from other materials based on process knowledge, field screening results, and location and then will be staged at a designated site-specific waste container storage area. The containers will be dispositioned using analytical results or process knowledge. These actions will be conducted in accordance with the requirements of WAC 173-303, *Dangerous Waste Regulations* and 40 *Code of Federal Regulations* (CFR) 302, "Designation, Reportable Quantities, and Notification."

A1.3 MANAGEMENT OF WASTE CONTAINERS

The containers will be stored inside the applicable site-specific waste container storage area (WCSA). The WCSAs shown in Figure 1 and 2 may be relocated within the vicinity of the identified waste sites to accommodate changes in the field operations. Similarly, due to limited work area between the fences on either side of 216-A-5, wastes generated at the 216-A-5 Crib may be moved to the WCSA identified in Figure 1 that is near the 216-A-10 Crib. If a WCSA is to be relocated to an area not within or in the vicinity of the identified waste site (other than the WCSA near 216-A-10), the lead regulatory agency will be notified before the change occurs. Containers awaiting analytical results will be marked and labeled "Waste Pending Analysis," as prescribed in the preceding sections. Weekly inspections will be performed to document the integrity, container marking/labeling, physical container placement, storage area boundaries/identification/warning signs, and spill control. Containers showing signs of deterioration will be identified on the container inspection form and immediately will be overpacked or repackaged. Spills or releases will be reported as stated above. In the event of a spill or release, appropriate immediate action will be taken to protect human health and the environment.

A1.4 STORAGE AND FINAL DISPOSAL

It is anticipated that IDW will be stored at the site-specific WCSAs until the waste samples are returned and the proper waste shipping papers are completed. In the event that sample returns are delayed, the majority of waste containers may be shipped for disposal, provided that sufficient, appropriate containers remain in the WCSA for packaging of samples upon their return. The process to develop proper waste shipping papers includes the following: receipt of analytical results, designation, profiling, and proper disposal paperwork. The designation process ensures the waste will be profiled for the proper disposal facility. Waste profiling provides information concerning each waste stream. The designation and profiling are conducted in accordance with dangerous waste regulation requirements (WAC 173-303-070, "Designation of Dangerous Waste" through 173-303-100, "Dangerous Waste Criteria"). Dangerous waste will be evaluated for applicable land disposal restrictions in accordance with WAC 173-303-140, "Land Disposal Restrictions." The presence of polychlorinated biphenyls will be evaluated in accordance with the *Toxic Substances Control Act of 1976* and WAC 173-303-9904, "Dangerous Sources List." Radiological wastes will be determined to be acceptable for near surface (onsite) disposal if the concentrations of radionuclides are below those in WCH-191, Rev. 0, *Environmental Restoration Disposal Facility Waste Acceptance Criteria*.

The IDW that does not meet the ERDF waste acceptance criteria will remain at the designated site-specific WCSA pending disposal at an appropriate location. A case-by-case disposal determination will be made in instances where IDW exceeds the ERDF waste acceptance criteria. IDW requiring treatment before disposal requires approval by the lead regulatory agency.

Wastes that cannot be radiologically released that do meet the ERDF waste acceptance criteria will be transported to the ERDF for disposal (ERDF is an "onsite" approved waste disposal facility). Nonradiologically contaminated dangerous waste may be shipped onsite to ERDF or to an offsite facility, contingent upon the waste meeting the offsite RCRA disposal facility's waste acceptance criteria and the CERCLA offsite determination granted by EPA.

If TRU levels of contamination are encountered, the suspect waste will be placed within engineered segregated boundaries of the designated storage area and posted according to radiological posting requirements. After representative samples are analyzed and the material is designated/characterized, the proper disposal facility will be selected. If the CWC is selected for long-term storage, soil sample(s) designated as TRU waste will be returned and placed back into the stored waste drum associated with the interval from which the sample was taken before it is shipped. Offsite determination of acceptability for waste selected for long-term storage at CWC will be obtained from the EPA. In addition, if any waste needs to be transported to the CWC, the EPA will be contacted to make any offsite determination before the waste is shipped. Any waste transported to the CWC must be dispositioned in accordance with the work plan required by TPA milestone M-016-93 for TRU waste generated by CERCLA cleanup actions at the Hanford Site and in accordance with the final M-016 cleanup schedule.

Miscellaneous solid waste identified as nondangerous/no-radiation-added solid waste that does not require disposal at ERDF and meets the Hanford Site free-release criteria may be disposed of in an appropriate solid waste disposal facility (Subtitle "D" landfill).

A1.5 RECORDS

Copies of all sampling records, waste inventory documentation, and waste container certification forms will be forwarded to the assigned waste management specialist to be included with completed weekly inspection forms in the waste file and to initiate waste tracking in the *Solid Waste Information Tracking System*. The completed waste files will be included in the project file following final waste disposition in accordance with applicable records management processes.

A1.6 ESTIMATE OF INVESTIGATION-DERIVED WASTE QUANTITIES

Estimates of the amount of waste that will be generated during this field investigation are given in Table 1. These quantities are based on IDW generated during previous 200 Areas drilling activities.

Table A-1. Estimate of Investigation-Derived Waste Quantities.

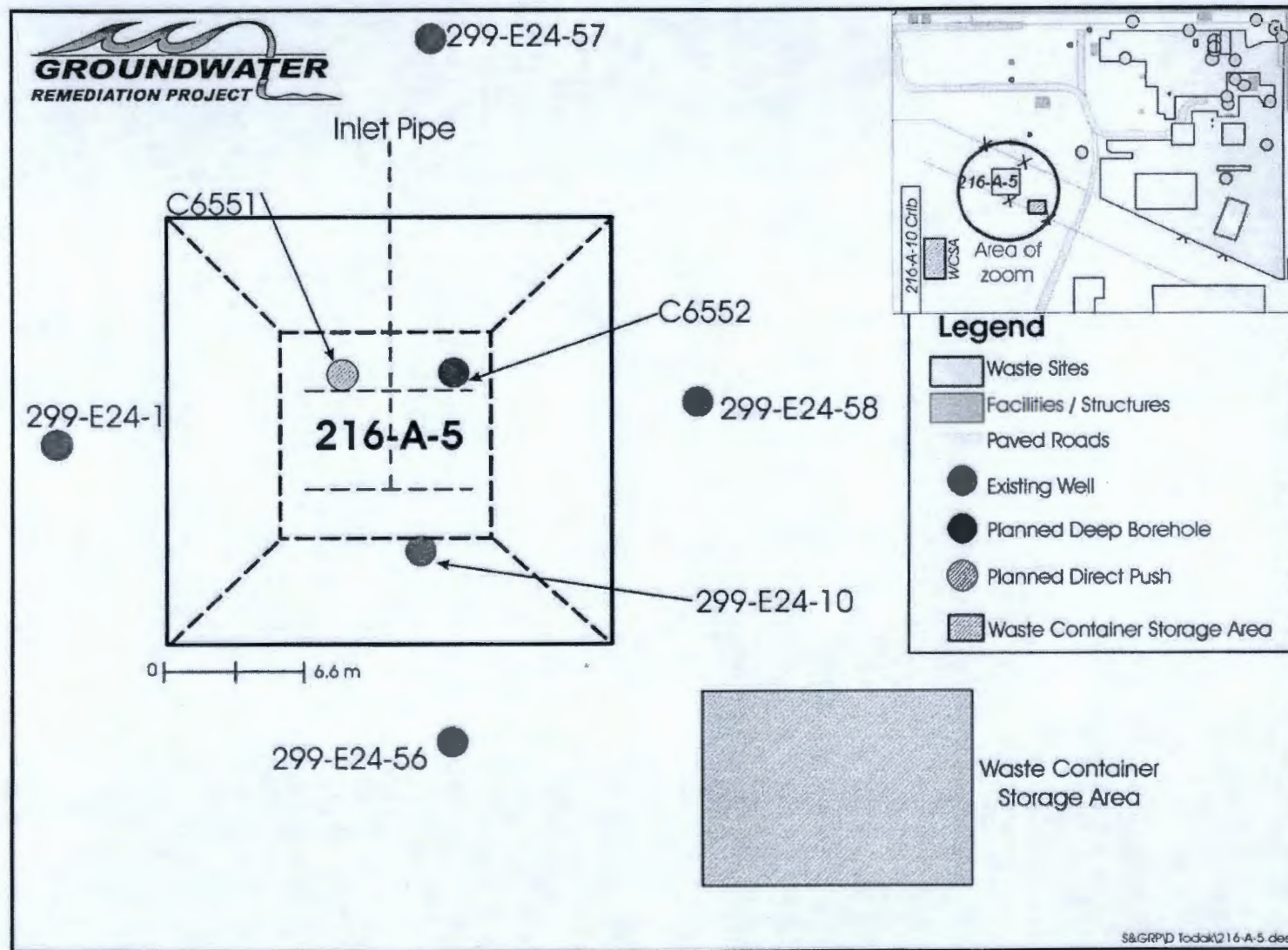
Operable Unit	Method	Liquid Wastes	Soil Wastes	Miscellaneous Solid Waste	
		Purgewater and decon fluids (drums ^a)	Cuttings (drums ^a)	PPE/Trash (drums ^a)	Disposable Equipment
200-PW-2/4	Drilling	10	25	8	540 linear feet drill casing 180 linear feet 4" push rod
200-PW-2/4	Decommisioning	N/A	N/A	TBD	TBD

^a208-L (55-gal) drums.

^bpurgewater.

PPE = personal protective equipment.

Figure A-1. 216-A-5 and 216-A-10 Location Map and Waste Container Storage Areas.



SGW-37320 REV 0



Table A-2. 200-PW-2/4 Operable Unit Well List.

200-PW-2 Wells			
299-E17-001	299-E17-051	299-E25-181	299-W22-045
299-E17-009	299-E24-016	299-E28-009	299-W22-079
299-E17-014	299-E24-017	299-E28-076	C6551*
299-E17-015	299-E24-058	299-W19-018	C6552*
299-E17-016	299-E24-059	299-W19-034A	C6553*
299-E17-017	299-E24-060	299-W19-034B	C6554*
299-E17-018	299-E24-160	299-W22-003	C6555*
299-E17-019	299-E25-002	299-W22-010	
299-E17-020	299-E25-010	299-W22-043	
200-PW-4 Wells			
299-E17-013	299-E25-018	299-W19-006	299-W19-089
299-E17-053	299-E25-019	299-W19-020	
299-E17-054	299-E25-020	299-W19-039	
299-E25-017	299-E27-005	299-W19-040	
* new wells to be drilled and decommissioned in association with the work described in this waste control plan			

A2.0 REFERENCES

- 40 CFR 302, "Designation, Reportable Quantities, and Notification," Title 40, *Code of Federal Regulations*, Part 302, as amended.
- 90-ERB-040, 1990, *Strategy for Handling and Disposing of Purgewater at the Hanford Site*, Washington (letter to P.T. Day, U.S. Environmental Protection Agency, and T.L. Nord, Washington State Department of Ecology, from R.D. Izatt), U.S. Department of Energy, Richland Operations Office, Richland, Washington, July 19, 1990.
- CP-13934, 2003, *Waste Control Plan for the 200-PW-4 Operable Unit*, Rev.0, Fluor Hanford, Inc, Richland, Washington.
- CP-13935, 2003, *Waste Control Plan for the 200-PW-2 Operable Unit*, Rev.1, Fluor Hanford, Inc, Richland, Washington.
- DOE/RL-98-28, 1999, *200 Areas Remedial Investigation/Feasibility Study Implementation Plan – Environmental Restoration Program*, Rev. 0, U.S. Department of Energy, Richland Operations Office, Richland, Washington.
- DOE/RL-2000-60, 2000, *200-PW-2 Uranium-Rich Process Waste Group Operable Unit RI/FS Work Plan and RCRA TSD Unit Sampling Plan*, Rev. 1, U.S. Department of Energy, Richland Operations Office, Richland, Washington.
- DOE/RL-2004-85, 2006, *Feasibility Study for the 200-PW-2 Uranium-Rich Process Waste Group and the 200-PW-4 General Process Condensate Group Operable Units*, Draft A, U.S. Department of Energy, Richland Operations Office, Richland, Washington.
- DOE/RL-2007-02, 2008, *Volume II, Addendum 5, Site-Specific Field-Sampling Plans for the 216-A-5 Crib and 216-S-1/2 Crib, 200-PW-2/4 Operable Unit*, U.S. Department of Energy, Richland Operations Office, Richland, Washington.
- Ecology, EPA, and DOE, 1989, *Hanford Federal Facility Agreement and Consent Order*, 2 vols., Washington State Department of Ecology, U.S. Environmental Protection Agency, and U.S. Department of Energy, Olympia, Washington, as amended.
- Resource Conservation and Recovery Act of 1976*, 42 USC 6901, et seq.
- SGW-37323, 2008, *Data Quality Objectives Summary Report for the Designation of Investigation-Derived Wastes in the 200-PW-2/4 Operable Unit*, Fluor Hanford, Inc, Richland, Washington.
- WAC 173-303, "Dangerous Waste Regulations," *Washington Administrative Code*, as amended, Washington State Department of Ecology, Olympia, Washington.
- WAC 173-303-070 through 173-303-100, "Designation of Dangerous Waste," *Washington Administrative Code*, as amended, Washington State Department of Ecology, Olympia, Washington.

WAC 173-303-140, "Land Disposal Restrictions," *Washington Administrative Code*, as amended, Washington State Department of Ecology, Olympia, Washington.

WCH-191, 2008, *Environmental Restoration Disposal Facility Waste Acceptance Criteria*, Washington Closure Hanford, Richland, Washington.

DISTRIBUTION**Onsite**

2

U.S. Department of EnergyRichland Operations Office

R. D. Hildebrand

A6-38

DOE Public Reading Room

H2-53

1

Washington Department of Ecology

J. B. Price

H0-57

11

Fluor Hanford, Inc.

K. D. Christensen

S0-01

S. E. Imhoff

S0-12

R. W. Oldham

E6-35

A. G. Rizzo

E6-35

P. M. Rogers

T4-04

L. C. Swanson

E6-35

W. R. Thackaberry

E6-35

D. Todak

E6-35

M. W. Vermillion

S0-01

J. D. Williams

E6-35

J. A. Winterhalder

E6-35

2

Lockheed Martin Information Technology

Central Files

B1-07

Document Processing Center

A3-94

SGW-37320 REV 0

This page intentionally left blank.